

### **REMARKS/ARGUMENTS**

Reconsideration of this application is requested. Claims 1-5 and 7-15 will be active in the application subsequent to entry of this Amendment.

#### **Discussion of Amendments to the Claims**

It is counsel's understanding that the examiner has reviewed the claims included with the Preliminary Amendment filed with the original application papers on January 4, 2006. The letters (A), (B), (C) have been reinserted as these are a convenient way of identifying the three separate layers. In this process the rejection stated in item 2 of the Official Action and further detailed in items 34-39, have been addressed and appropriate adjustments made.

Claim 1 has been reformatted and includes ranges for the thickness of the inorganic film (B) and the polyester-based resin layer (C). Basis for the thickness of the inorganic film may be found in original claim 6 (which has now been canceled as redundant) and basis for the thickness of the polyester-based resin layer (C) appears in the description of the invention in the paragraph bridging pages 16 and 17 of the description.

Claim 1 is also amended to refer to a "weight average" molecular weight for layer (C) as disclosed in the specification on page 12, lines 3-8. The term "thin" has been removed from claim 1 (and claims 12 and 14) responsive to item 34 of the Official Action.

Regarding items 37 and 38, the dependencies of claims 12 and 14 have been adjusted and shifted from claim 1 to claim 8.

Responsive to item 39, claim 15 has been amended to replace "or" with "and" as the examiner anticipated.

The term "biodegradable resin" appearing in claim 12 will be clearly understood by one having ordinary skill in this art and therefore is not indefinite. Moreover, applicants clearly define the term "biodegradable resin"-reference may be made to page 7 of the description of the invention which gives specific examples, including commercially available products. Such information would be readily understood by one having ordinary skill in this art. In any event, as the claims, including claim 2, will be interpreted in light of the description, the information on page 7 will be easily assessable to the skilled reader. Reconsideration of this objection is requested.

Response to Prior Art-Based Rejections

Claims 1, 2, 4-9 and 12-15 stand rejected as being “obvious” and therefore unpatentable over U.S. patent 6,103,363 to Takahashi et al in view of a published U.S. application to Kajimaru et al. Applicants dispute this rejection and believe that it is one based upon a hindsight reconstruction of the prior art, namely the combination of the two references being applied.

It is useful to review the law relating to obviousness-type rejections based upon combinations of references. To establish a case of *prima facie* obviousness, all of the claim limitations must be taught or suggested by the prior art. See M.P.E.P. § 2143.03. A claimed invention is unpatentable if the differences between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. *In re Kahn*, 78 USPQ2d 1329, 1334 (Fed. Cir. 2006) citing the legal standard provided in *Graham v. John Deere*, 148 USPQ 459 (1966). The *Graham* analysis needs to be made explicitly. *KSR v. Teleflex*, 82 USPQ2d 1385, 1396 (2007). It requires findings of fact and a rational basis for combining the prior art disclosures to produce the claimed invention. See *id.* (“Often, it will be necessary for a court to look to interrelated teachings of multiple patents . . . and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue”). The use of hindsight reasoning is impermissible. See *id.* at 1397 (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning”). Thus, a *prima facie* case of obviousness under Section 103(a) requires “some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct.” *Kahn*, 78 USPQ2d at 1335; see *KSR*, 82 USPQ2d at 1396. A claim which is directed to a combination of prior art elements “is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *Id.* at 1396. Finally, a determination of *prima facie* obviousness requires a reasonable expectation of success. See *In re Rinehart*, 189 USPQ 143, 148 (C.C.P.A. 1976).

Turning now to the applied references themselves, Takahashi describes a laminate, comprising:

- (I) Microporous resin film base layer;

- (III) inorganic oxide thin film layer,
- (II) gas barrier resin film layer; and
- (Ia) primer layer.

In Takahashi, the gas barrier resin for the gas barrier is a resin film layer, saturated polyesters may be used.

In the Office Action, the Examiner states that the polyester-based resin layer (C) according to the present invention corresponds to (II) gas barrier resin film layer. However, the (II) gas barrier resin film layer in Takahashi is a film and is not formed by applying a coating material. Further, at column 5, lines 27-28, Takahashi states "The thickness of the gas barrier resin film layers (II) is from 6  $\mu\text{m}$  to 40  $\mu\text{m}$ , and preferably from 8  $\mu\text{m}$  to 20  $\mu\text{m}$ ." This range is out of scope of the present invention as defined in amended claim 1.

Kajimaru discloses an aqueous dispersion of polyester resin having an acid value of 8 to 40 mg KOH/g and a weight average molecular weight of 9,000 or more, where the aqueous dispersion contains an organic solvent in an amount of less than 0.5% by mass.

On item 9, the Examiner argues that "At the time of the invention, it would have been obvious to one of ordinary skill in the art to use Kajimaru's polyester resin as the gas-barrier in Takahashi's laminate to improve the waterproof qualities of the barrier". This statement lacks factual basis because there is no description nor suggestion and also no intention or need to improve the waterproof qualities of gas barrier resin film layer in Takahashi. In fact, there is no motivation to improve waterproof qualities in Takahashi. This is an unsupportable combination of references as the motivation to combine them is clearly made after knowledge of the present invention (hindsight).

Further, Kajimaru's objective is to provide an aqueous dispersion of polyester resin is not to provide a polyester resin film. On the other hand, the gas barrier resin film layer of Takahashi is a film and is not formed by applying an aqueous dispersion of polyester resin according to Kajimaru. As Takahashi explains at column 11, "Production Examples of SiO<sub>2</sub>-Deposited Gas Barrier Film" a 12  $\mu\text{m}$  thick biaxially stretched polyethylene terephthalate film was used and a primer was applied thereon and further an SiO<sub>2</sub> layer was formed thereon.

Therefore, Takahashi and Kajimaru, the secondary reference, are different in their technical content/objective and there is no motivation that the polyester resin used in the

Kajimaru's aqueous dispersion to a polyester film. The rejection clearly selects only polyester from the aqueous dispersion in the Kajimaru's, modifying polyester used in the aqueous dispersion to form a polyester film, and applying it to the gas barrier resin film layer of Takahashi – there is no motivation to combine the two references.

Still further, even though the combination of Takahashi and Kajimaru by the Examiner's creation after knowledge of the present invention, the thickness of the gas barrier resin film layer (II) in Takahashi is out of the range of the present invention as defined in claim 1. When the thickness of the polyester-based resin layer (C) is more than 5  $\mu\text{m}$ , the transferring property of printing ink onto it tends to be deteriorated (*see* page 18, first paragraph). In Takahashi and Kajimaru, there is no suggestion that the above technical benefit or demerit by defining the thickness of the polyester-based resin layer (C).

Accordingly, claims 1, 2, 4-9 and 12-15 are not obvious from Takahashi and Kajimaru.

The combination of the Takahashi and Kajimaru references do not render obvious the claimed invention because all limitations of independent claim 1 are not fairly taught or suggested in the cited patents. Moreover, claims depending from those independent claims are also not made obvious by the documents because the limitations of an independent claim are incorporated in their dependent claims. M.P.E.P. § 2143.03 citing *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988).


Withdrawal of the Section 103 rejection is requested because the claimed invention would not have been obvious to the ordinarily skilled artisan at the time Applicants made their invention.

Having responded to all of the pending rejections contained in the Office Action, Applicants submit that the claims are in condition for allowance and earnestly solicit an early Notice to that effect. The Examiner is invited to contact the undersigned if any further information is required.

YOSHIDA ET AL.  
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Respectfully submitted,

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